# **National Transportation Safety Board**



Washington, D.C. 20594

APR 2 1 2004

Mr. Samuel G. Bonasso
Deputy Administrator
Research and Special Programs Administration
Washington, D.C. 20590

Dear Mr. Bonasso:

Thank you for your February 25, 2004, response to the National Transportation Safety Board regarding Safety Recommendations P-87-4, -5, and -23; P-90-29; P-91-1; P-95-1; and P-03-2, stated below, which were issued to the Research and Special Programs Administration (RSPA) between 1987 and 2003.

Safety Recommendations P-87-4 and -5 were issued on March 24, 1987, as a result of the Safety Board's investigation of the April 27, 1985, natural gas explosion and fire in Beaumont, Kentucky. Safety Recommendation P-87-23, stated below, was issued on September 9, 1987, as a result of the Safety Board's investigation of the July 8, 1986, Williams Pipeline Company gasoline pipeline rupture and fire at Mounds View, Minnesota.

# P-87-4

Require operators of both gas and liquid transmission pipelines to periodically determine the adequacy of their pipelines to operate at established maximum allowable pressures by performing inspections or tests capable of identifying corrosion-caused and other time-dependent damages that may be detrimental to the continued safe operation of these pipelines, and require necessary remedial action.

# P-87-5

Establish criteria for use by operators of pipelines in determining the frequency for performing inspections and tests conducted to determine the appropriateness of established maximum allowable operating pressures.

### P-87-23

Revise 49 Code of Federal Regulations (CFR) Parts 192 and 195 to include operational-based criteria for determining safe service intervals for pipelines between hydrostatic retests.

The Safety Board understands that RSPA completed a series of rulemakings (1) to require that natural gas transmission and hazardous liquid pipeline operators initiate and follow a pipeline integrity management program for high consequence areas (HCA) and (2) to evaluate the entire pipeline for lessons learned in HCAs that should be applied beyond HCAs. Critical parts of the program will be (1) implementation of required testing to identify and remedy corrosion and other time-dependent pipeline damage and (2) validation of the safety of pipelines at their maximum operating pressures. In addition, RSPA now requires each gas and liquid pipeline operator with HCAs to consider a number of criteria when establishing priorities for, and frequency of, pipeline integrity assessments. Operators are also required to address risks to pipeline safety, including repairs and pressure reductions as necessary.

Because RSPA has taken action as requested, Safety Recommendations P-87-4, -5, and -23 are classified "Closed—Acceptable Action."

Safety Recommendation P-90-29, stated below, was issued to RSPA on October 1, 1990, as a result of the Safety Board's investigation of the October 3, 1989, grounding of the U.S. fishing vessel *Northumberland*, resulting in a rupture of a natural gas pipeline and subsequent fire in the Gulf of Mexico, near Sabine Pass, Texas.

#### P-90-29

Develop and implement, with the assistance of the Minerals Management Service, the U.S. Coast Guard, and the U.S. Army Corps of Engineers, effective methods and requirements to bury, protect, inspect the burial depth of, and maintain all submerged pipelines in areas subject to damage by surface vessels and their operations.

The Safety Board appreciates receiving the update on RSPA's actions to address this recommendation. We note that in March 1998, RSPA worked with Texas A&M University to complete a report titled *Analysis of Pipeline Burial Surveys in the Gulf of Mexico*. We also note that RSPA issued four final rules related to this recommendation: 65 *Federal Register* (FR) 75377, which requires integrity management programs for large hazardous liquid pipelines, in December 2000; 67 FR 2136, which requires integrity management programs for smaller hazardous liquid pipelines, in January 2002; 67 FR 50824, which defines HCAs for gas transmission pipelines, in August 2002; and 69 FR 69778, which revises the HCA definition and requires integrity management programs for gas transmission pipelines in HCAs, in January 2003.

The Safety Board further notes that in December 2003, RSPA issued a notice of proposed rulemaking to require all operators to have procedures for periodic inspections of pipelines in navigable waters. Accordingly, pending issuance of the final rule that will complete the recommended actions, Safety Recommendation P-90-29 is classified "Open—Acceptable Response."

Safety Recommendation P-91-1, stated below, was issued to RSPA on July 17, 1991, as a result of the Safety Board's investigation of a liquid propane pipeline rupture and fire on March 13, 1990, at Texas Eastern Products Pipeline Company near Blenheim, New York.

# P-91-1

Define the operating parameters that must be monitored by pipeline operators to detect abnormal operations and establish performance standards that must be met by pipeline monitoring systems installed to detect and locate leaks.

The Safety Board understands that RSPA completed a series of rulemakings to require natural gas transmission and hazardous liquid pipeline operators to initiate and follow a pipeline integrity management program for HCAs and to evaluate the entire pipeline for lessons learned in HCAs that should be applied beyond HCAs. The rules require that each hazardous liquid pipeline operator have a means to detect leaks on its pipeline system. An operator must evaluate the capability of its leak detection systems and modify them as necessary to protect HCAs, based on a risk analysis of threats to the pipeline. Operators of gas transmission pipelines are also required to take additional measures to protect their pipelines in HCAs.

Because these final regulations satisfy the recommendation, Safety Recommendation P-91-1 is classified "Closed—Acceptable Action."

Safety Recommendation P-95-1, stated below, was issued to RSPA on February 7, 1995, as a result of the Safety Board's investigation of the March 23, 1994, pipeline failure at the Texas Eastern Transmission Corporation facility in Edison Township, New Jersey.

#### P-95-1

Expedite requirements for installing automatic- or remote-operated mainline valves on high-pressure pipelines in urban and environmentally sensitive areas to provide for rapid shutdown of failed pipeline segments.

The Safety Board appreciates RSPA's summary of actions taken to address this recommendation and notes that RSPA has developed new approaches and has studied a number of developing technologies that are helping the industry to better assess the operation of their pipelines. RSPA's actions to address Safety Recommendation P-91-1 also address this recommendation. Because RSPA has satisfactorily addressed the recommendation, Safety Recommendation P-95-1 is classified "Closed—Acceptable Action."

Safety Recommendation P-03-2, stated below, was issued to RSPA on February 27, 2003, as a result of the Safety Board's pipeline accident investigation of a natural gas pipeline rupture and fire near Carlsbad, New Mexico, on August 19, 2000.

# P-03-2

Develop the requirements necessary to ensure that pipeline operators' internal corrosion control programs address the role of water and other contaminants in the corrosion process.

The Safety Board notes that in 2003, RSPA published a final rule on gas integrity management that will address the role of water and other contaminants in the internal corrosion process and the procedures for prevention, inspection, and repair. The rule requires operators using direct assessment to follow the requirement in standard ASME/ANSI B31.8S, Appendix SP-B2. Because the final rule satisfies the recommendation, Safety Recommendation P-03-2 is classified "Closed—Acceptable Action."

Thank you for your comprehensive response to these important safety issues and your commitment to pipeline safety. The Safety Board looks forward to the completion of action on Safety Recommendation P-90-29.

Sincerely,

Mark V. Rosenker Vice Chairman

cc: Ms. Linda Lawson, Director Office of Safety, Energy, and Environment Office of Transportation Policy